## **Amendments to the Claims:**

Please revise the claims as follows:

(currently amended) A refractory composition comprising a colloidal silica binder :

## a colloidal silica binder; and

and a first set of components comprising about 50 to about 70 wt % alumina, about 10 to about 25 wt % zircon, and about 15 to about 35 wt % mullite, where the colloidal silica binder is in the range of about 5 wt % through about 20 wt % of the dry weight of the first set of components—and where the refractory composition comprises about 65 to about 80 wt % alumina, about 7 to about 15 wt % zirconia, and about 10 to about 20 wt % silica.

- 2. (cancelled)
- 3. (original) The refractory composition according to Claim 1, where the first set of components comprises about 55 to about 60 wt % alumina, about 15 to about 20 wt % zircon, and about 21 to about 27 wt % mullite
  - 4. (cancelled)
- 5. (previously presented) The refractory composition according to Claim 1, where the colloidal silica binder is in the range of about 8 wt %

through about 12 wt % of the dry weight of the first set of components.

- 6. (original) The refractory composition according to Claim 1, further comprising a setting agent.
- 7. (original) The refractory composition according to Claim 6, where the setting agent is magnesia.
- 8. (original) The refractory composition according to Claim 1, where the refractory composition is formed on at least one wear portion of a glass tank.
  - 9. (cancelled)
- 10. (original) The refractory composition according to Claim 1, where the refractory composition comprises about 70 to about 75 wt % alumina, about 9 to about 13 wt % zirconia, and about 13 to about 17 wt % silica.
  - 11. (cancelled)
- 12. (currently amended) A method of preparing a refractory for a glass melting furnace, comprising:

providing a refractory composition comprising a colloidal silica binder and about 65 to about 80 wt % alumina, about 7 to about 15 wt % zirconia, and about 10 to about 20 wt % silica a first set of components, wherein the first set of components comprises about 50 to about 70 wt % alumina, about

10 to about 25 wt % zircon, and about 15 to about 35 wt % mullite; and forming the refractory composition on the surface of the glass melting furnace.

- 13. (cancelled)
- 14. (currently amended) The method of claim 12 wherein the refractory composition is formed from the colloidal silica binder and a first set of components comprising about 50 to about 70 wt % alumina, about 10 to about 25 wt % zircon, and about 15 to about 35 wt % mullite, wherein the colloidal silica binder is in the range of about 5 wt % to about 20 wt % of the dry weight of the first set of components.
- 15. (previously presented) The method of claim 14 further comprising the step of mixing the first set of components with the colloidal silica binder.
- 16. (previously presented) The method of claim 12, wherein the refractory composition is formed by casting.
- 17. (previously presented) The method of claim 12, wherein the refractory composition is formed by pumping.
- 18. (previously presented) The method of claim 12, wherein the refractory composition is formed by shotcreting.

- 19. (previously presented) The method of claim 12 wherein the refractory composition further comprises a setting agent.
- 20. (previously presented) A method of preparing a refractory for a glass melting furnace, comprising:

providing a silica binder;

providing a first set of components comprising about 50 to about 70 wt % alumina, about 10 to about 25 wt % zircon, and about 15 to about 35 wt % mullite;

mixing the first set of components with the silica binder to form a refractory composition; and

forming the refractory composition on the surface of the glass melting furnace.

21. (previously presented) A method of preparing a refractory for a glass melting furnace, comprising:

providing a refractory composition comprising a silica binder and a first set of components, wherein the first set of components comprises about 50 to about 70 wt % alumina, about 10 to about 25 wt % zircon, and about 15 to about 35 wt % mullite; and

forming the refractory composition on the surface of the glass melting

furnace by a method selected from casting, pumping, and shotcreting.

- 22. (new) The refractory composition according to Claim 1, where the refractory composition comprises about 65 to about 80 wt % alumina, about 7 to about 15 wt % zirconia, and about 10 to about 20 wt % silica.
  - 23. (new) A refractory composition comprising:

a colloidal silica binder;

a setting agent comprising magnesia; and

a first set of components, where the colloidal silica binder is in the range of about 5 wt % through about 20 wt % of the dry weight of the first set of components and where the refractory composition comprises about 65 to about 80 wt % alumina, about 7 to about 15 wt % zirconia, and about 10 to about 20 wt % silica.